WHAT IS CLAIMED IS:

1. A phosphor composed of a single inorganic material, wherein when an excitation light composed of visible light is irradiated thereon, the phosphor emits a fluorescence of complimentary color with respect to a hue of the excitation light, and a portion of the excitation light transmits through the phosphor.

2. The phosphor according to claim 1 having a panel shape.

3. The phosphor according to claim 2 of which a wall thickness is between 0.1mm to 2mm.

4. The phosphor according to any of claims 1 to 3, wherein the excitation light composed of visible light is a light of which center wavelength is between 430 to 490nm, and the fluorescence is a light of which center wavelength is between 530 to 590nm.

5. The phosphor according to any of claims 1 to 4 composed of a crystallized glass including Ce^{3+} and formed by precipitating a garnet crystal.

6. The phosphor according to claim 5, wherein the garnet crystal is YAG crystal or YAG crystalline solid solution.

7. The phosphor according to claim 5 including 0.01 to 5 mol% of Ce_2O_3.

8. The phosphor according to any of claims 1 to 3 composed of a crystallized glass including 10 to 60mol% of $SiO_2 + B_2O_3$, 15 to 50mol% of $Al_2O_3 + GeO_2 + Ga_2O_3$, 5 to 30mol% of $Y_2O_3 + Gd_2O_3$, 0 to 25mol% of Li_2O, 0 to 15mol% of $TiO_2 + ZrO_2$, and 0.01 to 5mol% of Ce_2O_3.

9. The phosphor according to claim 8 including essentially no TiO_2 and ZrO_2.

10. The phosphor according to any of claims 1 to 3 composed of a crystallized glass including 10 to 50mol% of SiO_2, 15 to 45mol% of Al_2O_3, 5 to 30mol% of Y_2O_3, 0 to 15mol% of GeO_2, 0 to 20mol% of Gd_2O_3, 0 to 15mol% of Li_2O, 0 to 30mol% of $CaO + MgO + Sc_2O_3$, and 0.01 to 5mol% of Ce_2O_3.

11. A light-emitting diode utilizing the phosphor according to any of claims 1 to 3.

12. A light-emitting diode comprising:

a stem including a cathode lead terminal and an anode lead terminal,

a light-emitting diode chip connected to the anode lead

terminal,

a metal wire connecting the cathode lead terminal and the light-emitting diode chip,

a housing vessel that is fixed such that the stem and the light-emitting diode chip are air-tightly sealed, and of which a window portion is formed above the light-emitting diode chip, and

the phosphor according to any of claims 1 to 3 attached to the window portion of the housing vessel.

13. A crystallized glass including Ce^{3+} and formed by precipitating a garnet crystal.

14. The crystallized glass according to claim 13, wherein the garnet crystal is YAG crystal or YAG crystalline solid solution.

15. The crystallized glass according to claim 13 including 0.01 to 5 mol% of Ce_2O_3.

16. The crystallized glass according to any of claims 13 to 15 including 10 to 60mol% of $SiO_2 + B_2O_3$, 15 to 50mol% of $Al_2O_3 + GeO_2 + Ga_2O_3$, 5 to 30mol% of $Y_2O_3 + Gd_2O_3$, 0 to 25mol% of Li_2O, 0 to 15mol% of $TiO_2 + ZrO_2$, and 0.01 to 5mol% of Ce_2O_3.

17. The crystallized glass according to claim 16

including essentially no TiO_2 and ZrO_2.

18. The crystallized glass according to any of claims 13 to 15 including 10 to 50mol% of SiO_2, 15 to 45mol% of Al_2O_3, 5 to 30mol% of Y_2O_3, 0 to 15mol% of GeO_2, 0 to 20mol% of Gd_2O_3, 0 to 15mol% of Li_2O, 0 to 30mol% of CaO + MgO + Sc_2O_3, and 0.01 to 5mol% of Ce_2O_3.